

CLAIM SUMMARY DOCUMENT

The following listing of claims will replace all prior versions and listings of claims in this application.

1) (Currently Amended) A composite seal insertable between two relatively rotating members to seal in fluidtight manner a cavity defined between said members; the seal comprising a substantially rigid support for connection to a first of said members, and a flexible sealing element carried integrally by said support and comprising at least one annular sealing lip cooperating in sliding contact with a sealing surface of a second of said members; said flexible sealing element being made of a non-elastomeric, synthetic plastic resin; said annular sealing lip of the flexible sealing element is substantially in the form of a cylindrical sleeve defined by a first lateral surface cooperating, in use, with said sealing surface of said second member, and by a second lateral surface opposite the first and facing, in use, said first member; and by also comprising, in combination, an annular pressure element made of an elastomer and carried by said annular sealing lip on said second lateral surface of the annular sealing lip, the elastomer forming said pressure element not contacting the sealing surface of said second member in use; and a radial toroidal pressure spring carried by said elastomeric annular pressure element and inserted in an annular seat formed in the elastomeric annular pressure element, on the opposite side to said annular sealing lip; said support, in radial section, being substantially L-shaped and comprising a flange portion and a sleeve-shaped portion substantially coaxial with the sleeve-shaped annular sealing lip, with the sleeve-shaped portion of the support having one

end connected to the flange portion and an opposite free end; the annular sealing lip extending axially, on the opposite side to said flange portion of the support, to a length greater than the axial extension of said free end of said sleeve-shaped portion of said support; and the pressure element being mechanically connected to the annular sealing lip other than by way of the pressure spring.

2) (Previously Presented) A composite seal as claimed in Claim 1, wherein said flexible sealing element and said annular sealing lip are formed integrally in one piece, and are made of polytetrafluoroethylene (PTFE) or any other synthetic plastic resin of physical-chemical characteristics similar to those of PTFE.

3) (Currently Amended) A composite seal as claimed in Claim 1, wherein said elastomeric annular pressure element is mechanically connected ~~connected mechanically,~~ ~~by chemical bonding,~~ to said annular sealing lip of said flexible sealing element made of non-elastomeric synthetic plastic resin by chemical bonding.

4) (Previously Presented) A composite seal as claimed in Claim 3, wherein said elastomeric annular pressure element is glued, at the curing stage, to said second lateral surface of said annular sealing lip of said flexible sealing element made of non-elastomeric synthetic plastic resin.

5) (Previously Presented) A composite seal as claimed in Claim 3, wherein said support is at least partly embedded in a static elastomeric sealing element glued, at the curing stage, to said support.

6) (Previously Presented) A composite seal as claimed in Claim 5, wherein said elastomeric annular pressure element is formed in one piece with said static elastomeric sealing element; and in that said static elastomeric sealing element is so formed that at least part of said flexible sealing element made of non-elastomeric synthetic plastic resin is embedded in said static elastomeric sealing element and gripped against a stop surface of said support.

7) (Previously Presented) A composite seal as claimed in Claim 1, wherein said flexible sealing element made of non-elastomeric synthetic plastic resin is connected mechanically to said support and gripped between two adjacent rigid portions of the support.

8) (Previously Presented) A composite seal as claimed in Claim 1, wherein said first lateral surface of the annular sealing lip is provided with ribs or spiral ridges facing said sealing surface of the second member in use.

9) (Canceled)

10) (Canceled)

11) (Canceled)

12) (Canceled)

13) (Canceled)

14) (Canceled)

15) (Canceled)

16) (Canceled)

17) (Canceled)

18) (Currently Amended) A composite seal insertable between two relatively rotating members to seal in fluidtight manner a cavity defined between the members, the seal comprising: a substantially rigid support for connection to a first of the members; a flexible sealing element carried integrally by the support and comprising at least one annular sealing lip cooperating in sliding contact with a sealing surface of a second of the

members in use; the flexible sealing element being made of a non-elastomeric, synthetic plastic resin; the annular sealing lip of the flexible sealing element being substantially in the form of a cylindrical sleeve defined by a first lateral surface cooperating, in use, with the sealing surface of the second member, and by a second lateral surface opposite the first and facing, in use, the first member; an annular pressure element made of an elastomer that is fixed to the second lateral surface of the annular sealing lip; and a spring carried by the elastomeric annular pressure element and positioned in an annular seat formed in the elastomeric annular pressure element on the opposite side to the annular sealing lip; said support, in radial section, being substantially L-shaped and comprising a flange portion and a sleeve-shaped portion substantially coaxial with the sleeve-shaped annular sealing lip, with the sleeve-shaped portion of the support having one end connected to the flange portion and an opposite free end; the annular sealing lip extending axially, on the opposite side to said flange portion of the support, to a length greater than the axial extension of said free end of said sleeve-shaped portion of said support.

19) (New) A composite seal as claimed in Claim 18, wherein the annular pressure element is mechanically connected to the second lateral surface of the annular sealing lip by chemical bonding.

20) (New) A composite seal as claimed in Claim 18, wherein the annular sealing lip of the sealing element extends axially beyond a free end of the annular pressure element.

21) (Canceled)

22) (Canceled)

23) (Canceled)